by Schneider Electric

INSTALLATION

CM9700UTP Series Multichannel Active Receivers

16 or 32 Channels

C3646M-C (6/09)

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Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
15. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. Installation should be done only by qualified personnel and conform to all local codes.
17. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
18. Use only installation methods and materials capable of supporting four times the maximum specified load.
19. A CCC-approved power cord must be used to power this equipment when used in China.

Regulatory Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Description

The CM9700UTP Series multichannel active receiver is a 16- or 32-channel unit that can receive live video over unshielded twisted pair (UTP) cable. The front panel of each model contains a dial and a LED per channel; dials are used for selecting cable distance. The back panel of each model features BNC connectors for video output, RJ-45 video input connectors, and video ribbon cable to connect to a CM9700 Series matrix.

Models

CM9700UTP16A	16-channel active receiver; 16 BNC connectors, four RJ-45 video input connectors, and one ribbon cable connector
CM9700UTP32A	32-channel active receiver; 32 BNC connectors, eight RJ-45 video input connectors, and two ribbon cable connectors

Parts List

Qty	Description
1	CM9700UTP Series multichannel active receiver (CM9700UTP16A or CM9700UTP32A)
1	Power cord (USA, UK, or EU standard)
8 or 4	(Depending on the model) Cat5e cable assembly; mating connector provided and installed by user
4	Screws, 10-32 x 0.50-inch, Phillips pan head
4	Cage nuts, 10-32
4	Protective bumpers, 0.75-inch, recessed
4	Screws, 8-32 x 0.25-inch, Phillips pan head
16	Jumpers (only for CM9700UTP16A; required for CE compliance)
1	CM9700UTP Series Installation manual

FRONT PANEL

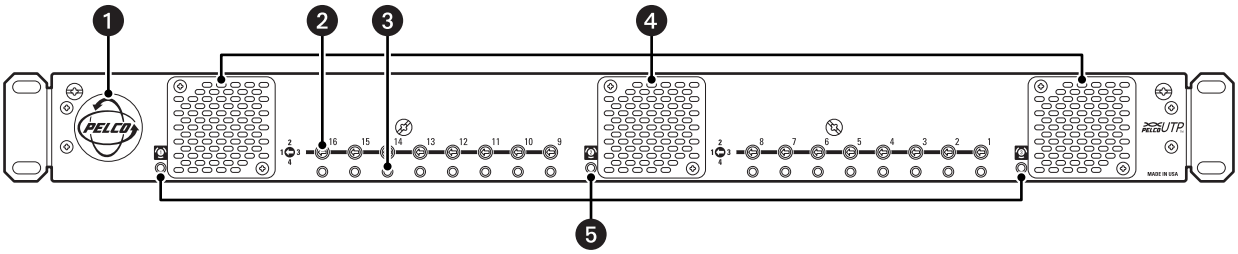


Figure 1. CM9700UTP16A Front Panel

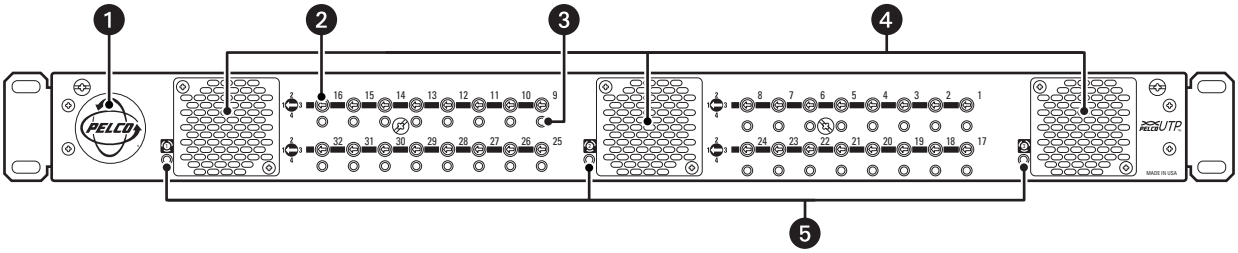


Figure 2. CM9700UTP32A Front Panel

1. **Pelco Badge:** Glows blue when the unit has power. When the temperature rises above the specified temperature (95°F [35°C]), or when any of the fans fail, the Pelco badge LED will blink and a buzzer will sound indicating there is an alarm condition.
2. **Distance Rotary Switch:** The manual selection of the gain for correct cable distance. Channels on both models are numbered right to left. The 16-channel unit is numbered 1 to 16; the 32-channel unit is numbered 1 to 16 and 17 to 32.
3. **Video Activity Indicators:** Sixteen or thirty-two LEDs (depending on model) indicate video activity, the type of video (color or black-white), and the status of the video being received. Indicator colors differ depending on the type of video connected to the units; LEDs for color video are different than the color indicators for black-white video.
   - **Green:** Indicates that color video is being received.
   - **Orange:** Indicates that black and white video is being received, or the color video range setting is wrong.
   - **Red:** Indicates that no video is being received, or the video range setting is wrong.
4. **Fans:** Maintain the unit's internal temperature within the specified range if the ambient operating temperature is at or below 95°F (35°C). All fans are removable and field replaceable. For information about maintaining the fan and fan filter, refer to *Maintenance* on page 17.
5. **Fan Alarm Indicators:** Glow red when an alarm triggers due to a fan failure.

BACK PANEL

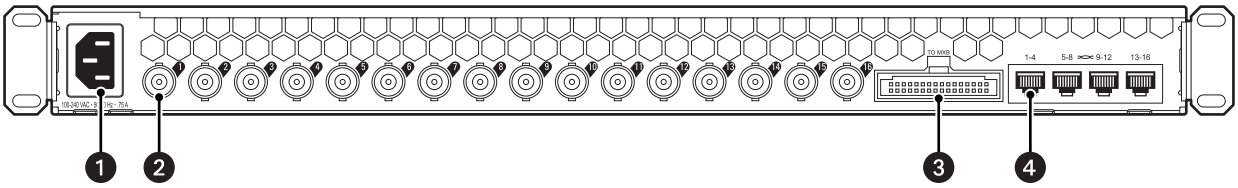


Figure 3. CM9700UTP16A Back Panel

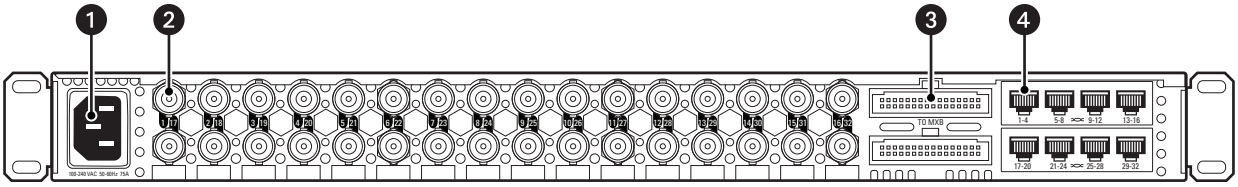


Figure 4. CM9700UTP32A Back Panel

1. **AC Power Connector:** Connects the UTP receiver to the mains power supply (100 to 240 VAC, 50 to 60 Hz, autoranging).
2. **BNC Connectors:** There are 16 or 32 coaxial video outputs (depending on model) for each unit. BNC connectors on both models are numbered right to left. The 16-channel unit is numbered 1 to 16; the 32-channel unit is numbered 1 to 16 and 17 to 32.
3. **Ribbon Cable Connectors:** Connects to a CM9700 Series matrix for video output.
4. **RJ-45 Connectors:** Video input from either the TW3016-PATCH1, TW3032-PATCH1, or wire assembly cable (part #WA01-5104-005AG). Each connector has eight pins for UTP connection.

Installation

RACK MOUNTING

Install the CM9700UTP Series active receiver in a standard 19-inch (48.26 cm) equipment rack using standard mounting hardware (10-32 cage nuts and 10-32 x 0.50-inch Phillips pan head screws, supplied). The receiver is one rack unit (1 RU) high.

DESKTOP MOUNTING

Install the CM9700UTP Series active receiver on a desktop using the four 8-32 x 0.25-inch Phillips pan head screws (supplied) to attach the protective bumpers to the bottom of the unit.

POWER AND VIDEO CONNECTIONS

1. Connect the power cord to the unit.
2. Connect the video input from the UTP cable to the RJ-45 connector on the back of the unit.
3. Connect the video output from the BNC to a video source.

CABLE SPECIFICATIONS

The supplied wire assembly cables are an easy connection option if patch panels are not available. The RJ-45 connector on each wire assembly plugs directly into the rear panel of the receiver. The four wire pairs on each wire assembly can be used for individual camera connections. Refer to Figure 6 on page 11 for a sample application.

Always connect the UTP wires on the cable positive to positive (+) and from negative to negative (–). For example, if you connect the blue wire to the positive (+) on the active receiver, make sure you connect the other end of the blue wire to the positive (+) on the transmitter. Figure 5 and Table A show the RJ-45 UTP pin designations.

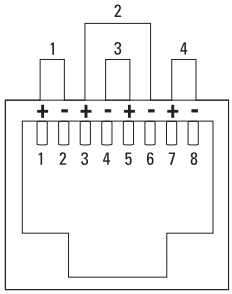


Figure 5. RJ-45 Connector Pins

Table A shows the RJ-45 connector pin assignments.

Table A. RJ-45 Pin Designations

Pin	Signal	Color	Video
1	Input 1 +	White/Orange	Video 1
2	Input 1 –	Orange	Video 1
3	Input 2 +	White/Green	Video 2
4	Input 3 –	Blue	Video 3
5	Input 3 +	White/Blue	Video 3
6	Input 2 –	Green	Video 2
7	Input 4 +	White/Brown	Video 4
8	Input 4 –	Brown	Video 4

You can connect the active receiver to a transmitter such as the TW4001P passive transceiver, TW3001AT active transmitter, and CC3710/CC3610 UTP cameras. The receiver also has video ribbon cable connectors for connecting to a CM9700 Series matrix. Connect these products using UTP Cat5e and Cat6 cable for best video performance.

Table B shows the maximum cable distance for video when connecting an active receiver to a TW4001P passive transceiver.

Table B. Cable Distance with TW4001P

Cable Type	Maximum Distance (video only)
Cat5	3,000 ft (914 m)
Cat5e	4,000 ft (1,219 m)
Cat6	4,000 ft (1,219 m)

Table C shows the minimum wire gauge for single wire and stranded wire.

Table C. Wire Gauge

Wire Gauge (minimum allowable)	
Single wire (solid)	24 AWG (0.25 mm^2)
Stranded wire (flexible)	24 AWG (1.0 mm^2)

Figure 6 shows a wire assembly cable (part #WA01-5104-005AG) connecting four cameras to a CM9700UTP32A. Refer to Figure 5 and Table A for the RJ-45 pin designations.

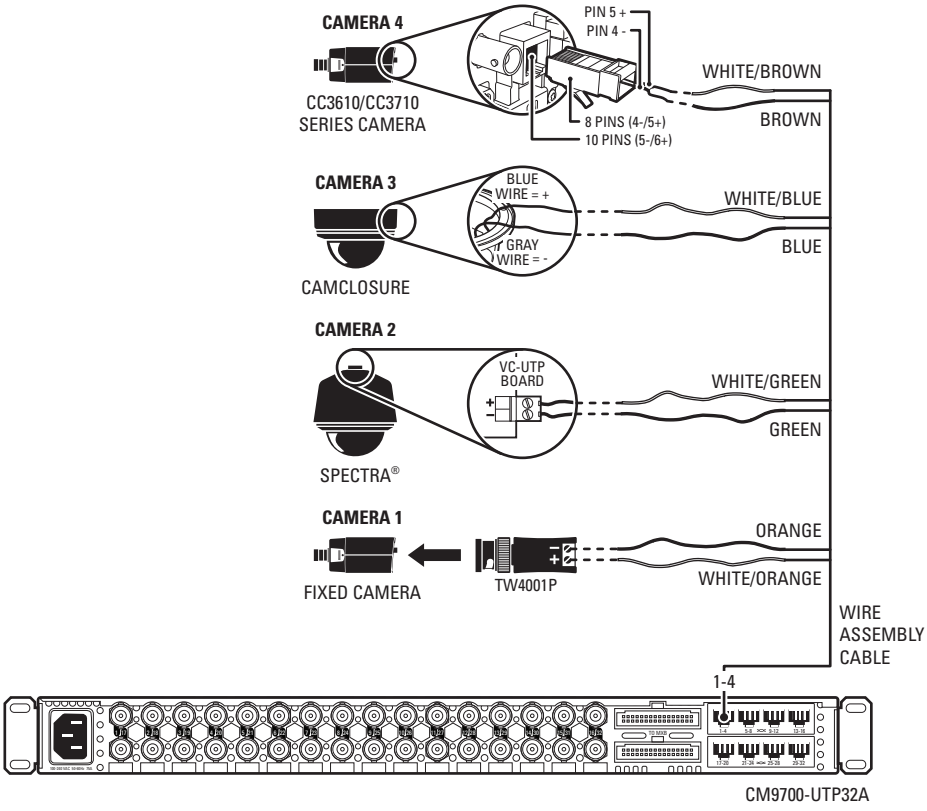


Figure 6. Using the Wire Assembly Cables

INSTALLING THE JUMPERS FOR CE COMPLIANCE (ONLY CM9700UTP16A)

⚠ **WARNING:** To meet CE compliance standards, jumpers *must be installed* on channels 1 through 16.

1. Unplug the unit to turn off the power.
2. Unscrew the six, black 4-40 x 0.25-inch Phillips flat head screws that secure the cover to the chassis.
3. Remove the cover.
4. Install the 16 jumpers on the pins; use one for each channel (refer to Figure 7). The pins are labeled J66 through J81.

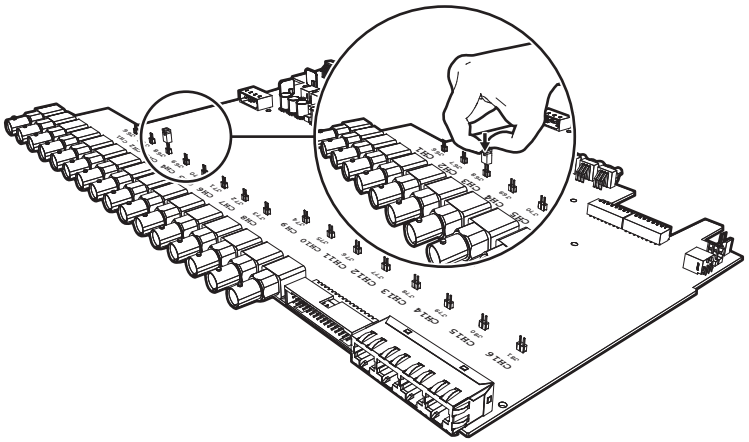


Figure 7. Installing the Jumpers for CE Compliance

INSTALLING THE JUMPERS FOR CE COMPLIANCE (ONLY CM9700UTP32A)

If you require jumpers for the 32-channel model (CM9700UTP32A), contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international).

COLOR VIDEO RANGE SETTINGS

For optimal tuning, adjust the rotary switch located on the front panel to the correct color video range position. Refer to Figure 8 and Table D, and then complete the following steps:

1. Plug the power cord into a power source to turn on the unit. The LED for the camera input on the front panel turns green if the channel is set to the correct color video range. If the color video range is incorrect, the LED turns orange or red.

   NOTE: The color burst signal-to-noise ratio is very low for cable lengths around 4,000 ft (1219 m) and longer, depending on the type of cable used. The video activity LED might not indicate the correct video status (for color or black-white). Pelco does not recommend operating the unit in an excessive noise environment, where picture quality could be compromised. For information about the color burst signal, refer to the *Advance Color Video Signal Settings* on page 15.

2. Observe the video on the monitor. If required, turn the rotary switch on the front panel to match the color video range (cable length) of the device connected to the receiver. Refer to Figure 8 and Table D for rotary switch positions and cable lengths.

3. **Initial system setup (only):** The device automatically adjusts the gain and adapts to the cable length in the range specified by the rotary switch; however, during initial installation, if the burst level is lower than a defined threshold, adjustment of the DIP switches may be required. To set the DIP switches for color video at initial power-up, complete the following steps:
   a. Unscrew the four thumb screws located on the front panel of the receiver.
   b. Carefully open the front panel until the hinges are completely exposed; the front panel should remain attached to the receiver.
   c. Refer to Table E on page 14 to set the DIP switches to obtain the desired video quality. Refer to Figure 9 on page 14 for the arrangement of the DIP switches on the front panel.
   d. Disconnect and reconnect the video input.
   e. If the gain is still insufficient, increase the gain of the DIP switch (refer to Table E on page 14), and then repeat step d.

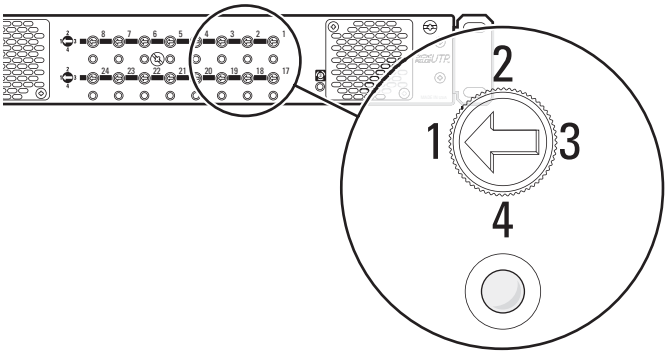


Figure 8. Factory Default Dial Position (32-channel model shown)

Table D. Rotary Switch Settings

Cable Length	Rotary Switch Position
0 to 1,000 ft (0 to 300 m)	1
1,000 to 2,000 ft (300 to 600 m)	2
2,000 to 3,000 ft (600 to 900 m)	3
3,000 to 4,000 ft (900 to 1,200 m)	4

NOTES:

- Rotary switch settings are dependent upon the installation, the type of cable used, and the connections made.
- The default setting for the DIP switch is medium gain (refer to *Black-White or Day/Night Video Settings* on page 14).
- The unit starts in black-white mode. If the gain is incorrectly set for color video, the color burst amplitude may not be adequate (< 70 mV) to switch the device to automatic gain control (AGC) mode.

BLACK-WHITE OR DAY/NIGHT VIDEO SETTINGS

For the best picture quality, adjust the DIP switch settings. Refer to Figure 9 and Table E, and then complete the following steps:

1. Plug the power cord into a power source to turn on the unit. When the input video signal is present, the LED on the front panel glows orange. If the video range is incorrect, the LED glows red.

   NOTE: The color burst signal-to-noise ratio is very low for cable lengths around 4,000 ft (1219 m) and longer, depending on the type of cable used. The video activity LED might not indicate the correct video status (for color or black-white). Pelco does not recommend operating the unit in an excessive noise environment, where picture quality could be compromised. For information about the color burst signal, refer to the *Advance Color Video Signal Settings* on page 15.

2. Unscrew the four thumb screws located on the front panel of the receiver.

3. Carefully open the front panel until the hinges are completely exposed. The front panel should remain attached to the receiver.

4. Refer to Table E to set the DIP switches to obtain the desired video quality. Refer to Figure 9 for the arrangement of the DIP switches on the front panel.

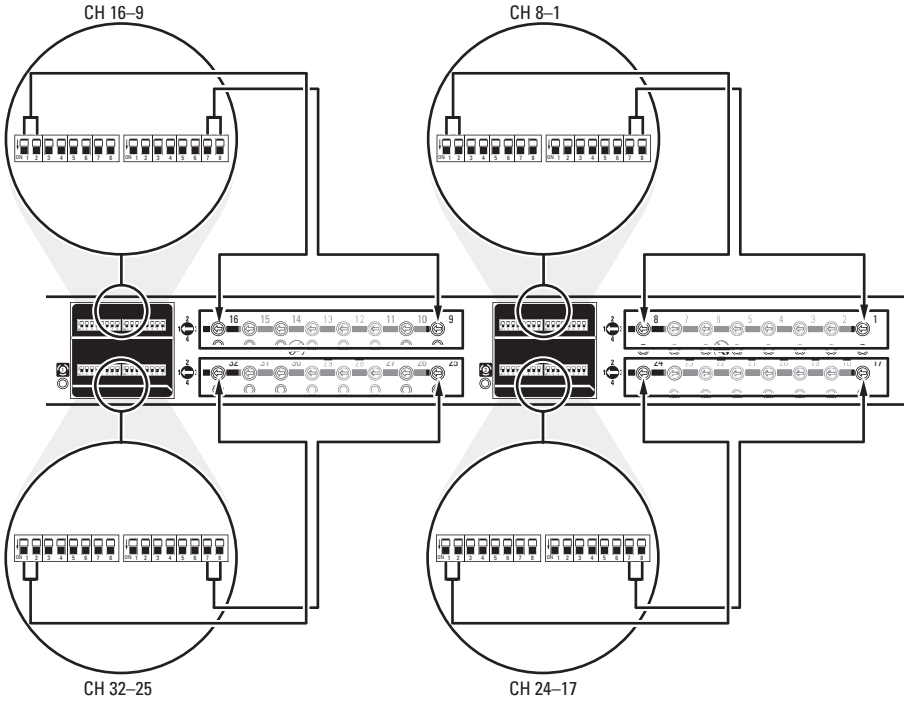
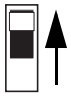


Figure 9. DIP Switch Locations with Front Panel Removed (32-channel model shown)

Table E. DIP Switch Settings

Gain	Left Switch Position	Right Switch Position
Low		
Medium		
High		

Configuration

This section describes an optional advanced tuning procedure for troubleshooting a video path. For most installations, the steps detailed in *Color Video Range Settings* on page 13 should be sufficient to set up the unit.

Required Equipment

- Video signal generator
- Oscilloscope

NOTE: A signal generator and oscilloscope are preferred to perform this procedure, but a video signal from a camera observed on an oscilloscope can also be used for this process.

ADVANCE COLOR VIDEO SIGNAL SETTINGS

To check the color burst level and set the video signal for optimal output:

1. From a signal generator or a color camera, send a multiburst color video signal through the UTP to the unit.
2. Set the rotary switch to the correct position for the cable length (refer to Table D on page 13).
3. The LED for the camera input on the front panel glows green if video is present. If the color video range is incorrect, the LED glows orange or red. Turn the rotary switch on the front panel, beginning at position 1, clockwise until the LED glows green.

   NOTE: If the LED glows green at more than one switch position, set the rotary switch at the lower position; this will ensure over-amplification does not occur.
4. Disconnect and then reconnect the video source. If the LED is green and the color video range on the oscilloscope resembles Figure 10, then the gain is sufficient. The color burst and sync closely match the output of the ideal video signal (refer to Figure 11).

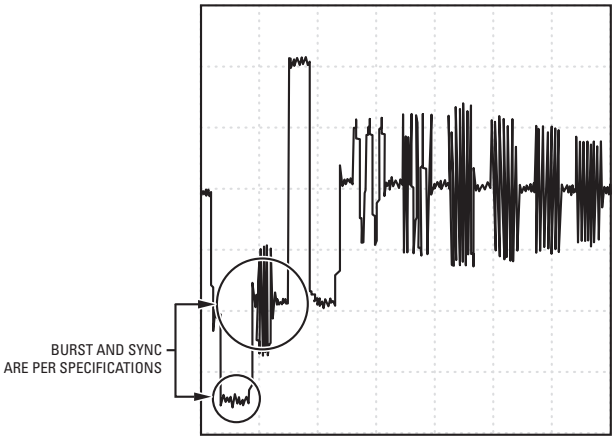


Figure 10. Color Burst and Sync are per Specifications

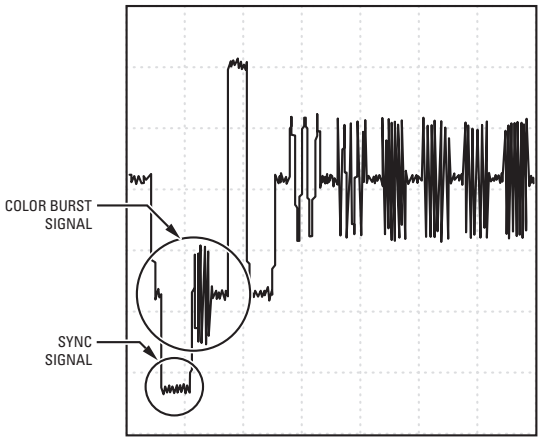


Figure 11. Ideal Video Signal

5. If the video signal is out of range, increase the gain by resetting the position of the DIP switches (refer to Table E on page 14).
6. Repeat steps 4 and 5 until the DIP switches are set to High gain or the LED glows green.
7. If the video signal is still out of range, turn the rotary switch to the next switch position, and then repeat step 4. Continue to repeat this process until the LED glows green, and the color video range on the oscilloscope resembles Figure 10 and Figure 11.

ADVANCE BLACK-WHITE VIDEO SIGNAL SETTINGS (DAY/NIGHT CAMERAS)

Using a video signal generator, complete the following steps to fine tune the black and white signal:

1. Verify the color video signal (refer to *Advance Color Video Signal Settings* on page 15).
2. Send a black-white video signal, from a signal generator or a black-white camera, through the UTP to the unit.
3. Set the rotary switch to the correct position for the cable length (refer to Table D on page 13). If the cable length is not known, then begin at position 1 on the rotary.
4. The LED for the camera input on the front panel glows orange if black-white video is present.
5. Turn the rotary switch on the front panel, beginning at position 1, until the video signal on the oscilloscope resembles Figure 12.

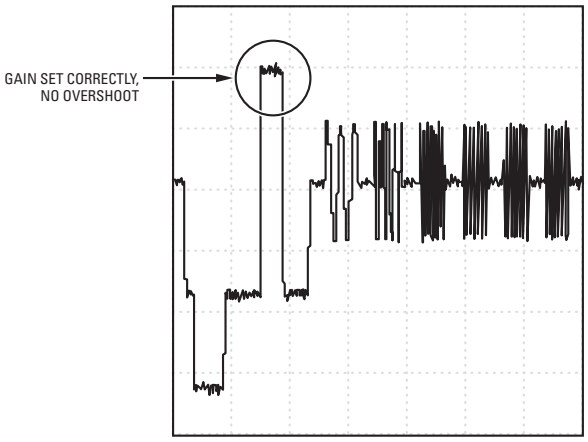


Figure 12. Ideal Black-White Video Signal

6. If the video signal is out of range, increase the gain by resetting the position of the DIP switches (refer to Table E on page 14). The optimal DIP switch position for black-white video is medium gain (300 meters). A high gain setting will overamplify the signal (refer to Figure 13).

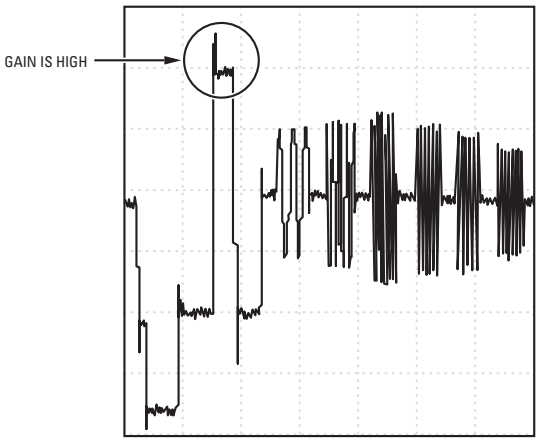


Figure 13. High Gain Signal

Maintenance

For proper ventilation, use the following instructions to maintain the fan filter and fan. For information about the operating temperature range, refer to *Specifications* on page 20.

FAN FILTER: CLEANING OR REPLACING

Filters can be cleaned and reused, or they can be replaced. The fan filter should be removed and cleaned as required to ensure proper ventilation and cooling of the unit. A clogged fan filter or an ambient operating temperature exceeding 95°F (35°C) will cause the unit's internal temperature to rise above the specified temperature range. When this happens, the Pelco badge LED will flash and an alarm will sound indicating there is an alarm condition; however, the fan's LED indicator will not glow red. If this occurs, replace the fan filter next to the alarm indicator.

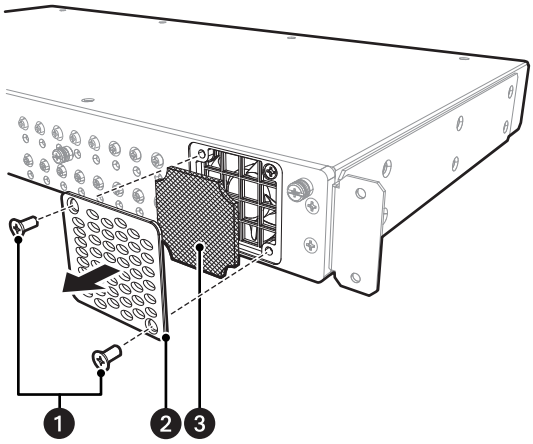


Figure 14. Fan Filter Replacement (32-channel model shown)

1. 4-40 x 0.25-inch, Phillip flat head screws, black
2. Fan guard
3. Fan filter (part number FF01-3503-0500)

To remove a fan filter, refer to Figure 14 and perform the following steps:

1. Unscrew the two, black 4-40 x 0.25-inch Phillips flat head screws that secure the fan guard to the front panel. Set the screws to the side.
2. Remove the fan guard. Set the fan guard to the side.
3. Remove the filter and inspect it for wear and physical damage.
4. Perform one of the following options:
   a. To clean a filter:
      (1) *Do not use* compressed air to clean the filter; instead, use a compressed gas duster.
      (2) Reinstall the filter.
   b. To replace a worn or damaged filter, install a new filter.
5. Reinstall the fan guard and Phillips flat head screws removed in steps 1 and 2.

FAN REPLACEMENT

Fans maintain the unit's internal temperature within the specified range if the ambient operating temperature is at or below 95°F (35°C). Fans are removable and field replaceable. If a fan fails, the Pelco badge LED will flash, an alarm will sound, and the fan's indicator will glow red indicating an alarm condition. If this occurs, replace the fan next to the alarm indicator.

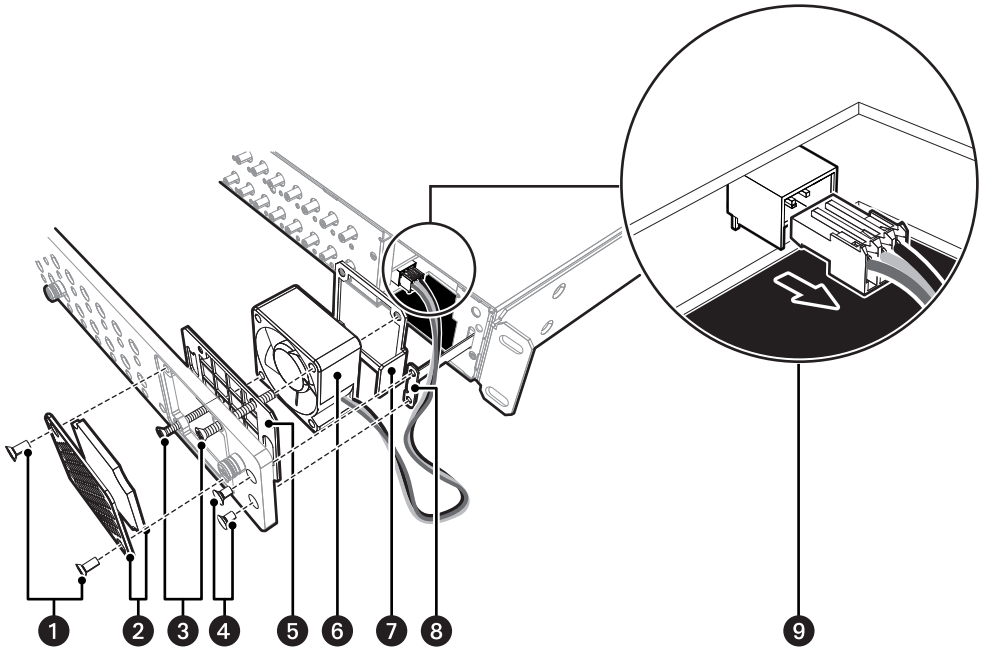


Figure 15. Fan Replacement (32-channel model shown)

1. 4-40 x 0.25-inch, Phillip flat head screws, black
2. Fan guard and filter
3. 4-40 x 1.187-inch, Phillip flat head screws, black
4. 4-40 x 0.25-inch, Phillip flat head screws, black
5. Inner fan grill
6. Fan assembly (part number WA01-4744-011D)
7. Fan mount
8. Front panel bracket
9. Fan wire assembly

To replace a fan, refer to Figure 15 and perform the following steps:

1. Unplug the unit to turn the power off.
2. Loosen the four thumb screws located on the front panel cover (refer to Figure 16). Pull the front panel away from the chassis, and then let it hang from the front panel brackets.

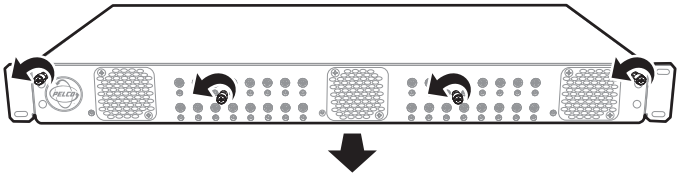


Figure 16. Remove Front Panel (32-channel model shown)

3. Unscrew the two, black 4-40 x 0.25-inch Phillips flat head screws that secure the front panel to the front panel bracket.
4. Unscrew the two, black 4-40 x 0.25-inch Phillips flat head screws that secure the fan guard to the front panel. Remove the fan guard and filter.
5. Unscrew the two, black 4-40 x 1.187-inch Phillips flat head screws that secure the inner fan grill, fan assembly, and fan mount to the front panel.
6. Remove the installed fan assembly. Disconnect the fan wire assembly from the connector located inside the unit.
7. Install the new fan, reconnect the fan wire assembly, and then reinstall the fan mount and inner fan grill. Secure with the two, black 4-40 x 1.187-inch Phillips flat head screws
8. Reattach the front panel to the unit. Replace the filter and reinstall the fan guard with two, black 4-40 x 0.25-inch Phillips flat head screws.

Specifications

VIDEO

Video Standards	NTSC/PAL/EIA/CCIR composite
Video Output	
CM9700UTP16A	16 BNC and 1 ribbon cable connector
CM9700UTP32A	32 BNC and 2 ribbon cable connectors
Frequency Response	50 Hz to 6 MHz
Common Mode/Differential	
Mode Rejection	>60 dB
Video Output	1.2 Vp-p

ELECTRICAL

Input Voltage	100 to 240 VAC, 50 to 60 Hz, autoranging
Input Current	
CM9700UTP16A	0.38 A
CM9700UTP32A	0.75 A
Wire Type	UTP (24 AWG minimum)
Wire Category	Cat5, Cat5e, or Cat6
Wire Distance	
Cat5	3,000 ft (914 m)
Cat5e and Cat6	4,000 ft (1,219 m)
DC Loop Resistance	20 ohms per 328 ft (100 m)
Differential Capacitance	6.6 nF/328 ft (100 m) maximum
Transient Immunity	300 W peak pulse power (8/20 US)
Single Wire (solid)	24 AWG (0.25 mm^2)
Stranded Wire (flexible)	24 AWG (1.0 mm^2)

MECHANICAL

Connectors	
BNC	Video output
Ribbon Cable Connector	Video output
RJ-45	UTP input
Power Connector	IEC connector
Construction	Steel chassis, aluminum front panel
Finish	Black matte finish

FRONT PANEL INDICATORS/FUNCTIONS

LED Indicators	16 or 32 video status LEDs (depending on the model), 3 fan status LEDs, and Pelco badge power status
Pelco Badge	
Power	Blue
Temperature and Fan Status	Flashes blue
Alarm Status	Audible
Video Status	Green, red, orange
Fan Alarm	Red

ENVIRONMENTAL

Operating Temperature	32° to 95°F (0° to 35°C) at unit air intake
Relative Humidity	0 to 90%, noncondensing

NOTE: The temperature at the unit air intake can be significantly higher than room temperature. Temperature is affected by rack configuration, floor layout, air conditioning strategy, and other issues. To prevent performance failure and unit damage, make sure the temperature at the unit is continuously within the operating temperature range.

PHYSICAL

Dimensions	9.00" D x 18.80" W x 1.72" H (23.00 x 47.80 x 4.37 cm)
Unit Weight (approximate)	
CM9700UTP16A	8.10 lb (3.68 kg)
CM9700UTP32A	9.25 lb (4.19 kg)

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years:
  - Fiber optic products
  - TW3000 Series unshielded twisted pair (UTP) transmission products
  - CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models
- Three years:
  - Pelco-branded fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, IP3701H Series, and IX Series)
  - EH1500 Series enclosures
  - Spectra® IV products (including Spectra IV IP)
  - Camclosure® Series (IS, ICS, IP) integrated camera systems
  - DX Series digital video recorders, DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, and NVR300 Series network video recorders
  - Endura® Series distributed network-based video products
  - Genex® Series products (multiplexers, server, and keyboard)
  - PMCL200/300/400 Series LCD monitors
- Two years:
  - Standard varifocal, fixed focal, and motorized zoom lenses
  - DF5/DF8 Series fixed dome products
  - Legacy® Series integrated positioning systems
  - Spectra III™, Spectra Mini, Spectra Mini IP, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
  - Esprit Ti and TI2500 Series thermal imaging products
  - Esprit and WW5700 Series window wiper (excluding wiper blades).
  - CM6700/CM6800/CM9700 Series matrix
  - Digital Light Processing (DLP®) displays (except lamp and color wheel). The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
  - Intelli-M® eIDC controllers
- One year:
  - Video cassette recorders (VCRs), except video heads. Video heads will be covered for a period of six months.
- Six months:
  - All pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

12-23-08

Green The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.

This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

REVISION HISTORY

Manual #	Date	Comments
C3646M	9/08	Original version.
C3646M-A	11/08	Replaced product photo on front cover, added parts list, and revised maintenance section. Also revised the frequency response data, and added the shipping weight and single/stranded wire information to the specifications section.
C3646M-B	1/09	Removed the SECAM video standard from the specifications section.
C3646M-C	6/09	Revised manual to include both the 16-channel and 32-channel units.

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